

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-029013**Date Inspected:** 17-Jan-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** As noted below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

**Ultrasonic Testing of ESW****ESW F, Face B:**

This QA performed Ultrasonic Testing (UT) on approximately 500mm of Tower Electroslag Complete Joint Penetration (CJP) shear plate weld designated as "ESW F" face B. Location (Y=7000~7500) of this weld was inspected using this testing method.

At the request of QA Level III Robert Mertz, ABF personnel, and Quality Control personnel this QA performed information only UT. The goal of this testing was to ascertain whether UT could be used to observe the planar characteristics of indications previously discovered at this location. This QA used the 6db drop amplitude method to record the depths of the top and bottom of these previously discovered indications.

The findings were recorded as follows:

**Location #1**

Y= 7435mm

B- SP=86mm, DP= 30mm

B1- SP= 72mm, DP= 25mm

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## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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B2- SP= 117mm, DP= 41mm

Location #2

Y= 7385mm

B- SP=124mm, DP= 43mm

B1- SP= 104mm, DP= 36mm

B2- SP= 141mm, DP= 50mm

Location #3

Y= 7150mm

B- SP=103mm, DP= 36mm

B1- SP= 56mm, DP= 20mm

B2- SP= 148mm, DP= 52mm

Location #4

Y= 7065mm

B- SP=127mm, DP= 45mm

B1- SP= 114mm, DP= 40mm

B2- SP= 136mm, DP= 48mm

B1 represents the “top”, or shallowest recorded depth of the indication.

B2 represents the “bottom”, or deepest recorded depth of the indication.

This QA has not generated a TL-6027 UT report on this date. Findings have not been joint verified by Quality Control inspection personnel at this time.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Conversation was relevant to testing performed during this shift.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

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**Inspected By:** Clifford, William

Quality Assurance Inspector

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**Reviewed By:** Reyes, Danny

QA Reviewer